

ALL FIBER AUTOCORRELATOR

Abstract

An autocorrelator apparatus and method for economically
5 measuring physical properties of an object where the measurement
path is at least semi-translucent to light, such as thicknesses
in multilayered optical structures, group index of refraction,
and distance to a surface. The apparatus includes a non-
coherent light fiber interferometer and an optional coherent
10 light fiber interferometer in association so as to share PZT
fiber modulators. Thickness and boundary extent measurements
can be made, for example, of solids, liquids, liquids moving
along a horizontal plane, or liquids flowing down a plane.

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